

724-770-4339 - Phone
724-770-5601 - Fax

Attachment (Declaration under 35 C.F.R.1.132)



Application No. 10/021,716
Paper dated August 22, 2006
In Reply to a First Office Action
dated March 7, 2006
Attorney Docket No. 9220 USA-NONP

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: : Examiner: Irina S. Zemel
ARCH, Paul Edward :
BRESSLER, John Thomas : Confirmation #4655
BERGHMANS, Michel Floretine Jozef:
BLEIJENBERG, Karel, Cornelis : Art Unit: 1711
COWAN, David Allen :
: Attorney Docket No.
U. S. Serial No. 10/021,716 :
: 9220 USA-NONP
Filed: November 30, 2001 :
:
Foamed Cellular Particles Of :
An Expandable Polymer Composition:

DECLARATION UNDER 37 C.F.R. 1.132

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

I, Paul Edward Arch, hereby declares as follows:

1. I am a co-inventor of the invention described and claimed in the above-captioned application.
2. I am currently employed by NOVA Chemicals Inc. in the capacity of Research Fellow.
3. I received a [degrees and institutions and dates degrees received]

December 1999: University of Pittsburgh, Master of
Science in Materials Science

December 1987: Drexel University, Master of Science in
Chemical Engineering

May 1975: Carnegie Mellon University, Bachelor of
Science in Chemical Engineering

5. I am a member of the following professional
societies:

Expandable Polystyrene Molders Association (EPSMA - see
www.epsmolders.org)

ASTM International ASTM - (see www.astm.org)

Society of Plastics Engineers (SPE - see www.4spe.org)

6. I have worked in the area of expandable
polystyrene polymers for the past 24 years. At the time
the invention was made, I was a Sr. Development
Engineer. I am also a named inventor on four U.S.
Patents: 4,798,749; 4,853,445; 4,840,759, and 6,908,949.

7. In connection with the above-captioned
application, I have carefully studied and reviewed U.S.
Patent Application Serial No. 10/021,716, including the
amended claims set forth in the attached Amendment; and
the Office Action dated March 7, 2006, including the
Examiner's rejection of the claims in view of WO
00/15703 to NOVA Chemicals.

8. After reviewing this Office Action and the WO
00/15703, it is my well-considered opinion that claims
1, 3-25 and 49 in their amended form are not anticipated

and/or obvious particularly in view of the comparable example of WO 00/15703. The particles of this comparative example have a pentane level of 5.9% by weight; whereas, the foamed cellular particles of the invention now have a pentane level ranging from 2.5% to 3.5% by weight. This weight percent range has recently become very critical to some of the customers of NOVA Chemicals Inc., particularly to those polystyrene particle converters located in the State of California. This is in view of the fact that some stricter environmental regulations for enforcing the limitations of the VOC emissions in the San Joaquin Valley are now being considered. These foamed cellular particles of the invention may be used to mold foamed produce boxes that are used to package vegetables and fruits, e.g. table grapes in this area, and the lower pentane range of 2.5% to 3.5% by weight would be more acceptable to the local environmental authorities.

9. From 2001 to 2002, NOVA Chemicals Inc. processed and shipped over one million pounds of the foamed cellular particles of the invention to the produce box molders in the State of California. The total pentane levels in these foamed cellular particles of the invention ranged from 2.5 to 3.5 weight percent. The resulting foam containers were satisfactory, i.e. structurally sound to adequately protect the table grapes being shipped in the produce boxes.

10. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true;

and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Paul Edward Arch

Paul Edward Arch

August 22, 2006

Date